AF

SONYJP 3.0-093
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Inoue et al.

Application No.: 09/466,279 Group Art Unit: 2623

Filed: December 17, 1999 Examiner: R. M. Brown

For: RECEIVING SYSTEM FOR DIGITAL BROADCASTING AND RECEIVING APPARATUS FOR DIGITAL BROADCASTING

APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicants hereby file this Brief on Appeal to appeal from the final rejection of claims 1, 3-11, and 13-20 mailed February 9, 2007, and in response to the Advisory Action mailed June 22, 2007.

11/06/2007 RFEKADU1 00000027 121095 09466279
01 FC:1402 510.00 DA

TABLE OF CONTENTS

I. REAL PARTY IN INTEREST....3
II. RELATED APPEALS AND INTERFERENCES....4
III. STATUS OF CLAIMS....5
IV. STATUS OF AMENDMENTS....6
V. SUMMARY OF CLAIMED SUBJECT MATTER....7
VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL....11
VII. ARGUMENT....12
A. Claims 1, 3-8, 10-11, 13-18, and 20 are Patentable Over *Yoshino* in View of *Staats*....12
1. Independent Claims 1 and 11....12
a. Unique Node Identifier and Node Unique Identifier...13
b. Base Addresses....14
c. Node Reference Identifier....15
d. Staats Does Not Cure the Deficiencies of *Yoshino*....18
2. Claims 3 and 13....19
3. Claims 4 and 14....20
4. Claims 6 and 16....20
5. Claims 5, 7, 8, 15, 17, and 18....21
B. Claims 9 and 19 are Patentable Over *Yoshino* in View of *Staats*, and in Further View of U.S. Patent No. 6,507,953 to Horlander et al. ("*Horlander*")....21
VIII. CONCLUSION....24

I. REAL PARTY IN INTEREST

The real party in interest is Sony Corporation, the assignee of record.

II. RELATED APPEALS AND INTERFERENCES

Appellant is not aware of any other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the presently pending appeal.

III. STATUS OF CLAIMS

Claims 1, 3-11, and 13-20 are pending in the application and on appeal. All of the claims have been rejected under 35 U.S.C. § 103(a).

Claims 2 and 12 are cancelled.

A clean copy of the claims on appeal is attached hereto as Appendix A.

IV. STATUS OF AMENDMENTS

No amendments have been made to the claims subsequent to the final rejection. An amendment to Fig. 8A changing the text of "Node Unique ID" to "Unique ID Numbers of the Nodes" has been entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The claims on appeal relate to a system and method of receiving digital broadcasting signals. (*See, Specification*, p.1, ll.1-9). A digital satellite broadcast signal is typically received by an integrated receiver decoder (IRD) connected to a television receiver. (*See id.*, at 1, ll.24-26). The IRD selects a program signal and decodes video and audio signals. (*Id.*, at 1, ll.26-28).

The IRD may also include an IEEE 1394 interface that transfers video data and audio data between digital video equipment and digital audio equipment at a high speed. (*Specification*, p.1, ll.10-13). In this way, the equipment and the IRD form a network in which each equipment is assigned node identification (ID) numbers. (*Id.*, at 2, ll.9-11). Such node identification (ID) numbers may range from "0" to "63" in accordance with IEEE 1394 standards. (*Id.*, at 2, ll.11-13; p.9, ll.32-33). These numbers may be allocated to equipment connected to the IEEE 1394 interface bus. (*Id.*) Within this scheme, the last node (number "63") is used for broadcasting. (*Id.*, at 2, ll.13-14; p.9, ll.33-34). When data is transferred, an ID number allocated to a node is used to identify an equipment unit connected to the node. (*Specification*, p.2, ll.9-11). Accordingly, up to 63 equipment units may be connected to the bus at one time. (*Id.*, at 2, ll.14-15). However, having such a large number of units simultaneously connected would decrease efficiency of the interface, because a time required to select a desired unit would significantly increase. (*Id.*, at 2, l.27 - p.3, l.2). For example, if a list of connected units is reviewed in order to find the desired unit, the time required to scroll through the list would increase as the number of connected

units increased. Thus, typically only five nodes are connected to the bus at any given time (*Id.*, at 2, ll.25-27).

The claims of the present application provide for improved operability and increased efficiency of an apparatus for receiving digital broadcast signals and a method of recognizing digital signal processing devices on a bus. (*Specification*, p.3, ll.17-24). As shown in Fig. 4, a number of equipment units 15A, 15B, 15C, may be connected to the IRD 1 through the IEEE 1394 interface. (*Id.*, at 9, ll.25-31). As each equipment unit is registered, its unique node ID is stored in a nonvolatile memory. (*Id.*, at 10, ll.2-6). That is, ID numbers of the nodes are stored in correspondence to the registered equipment unit. (*Id.*) Thus, "even if the equipment is disconnected from the interface and connected again, the IRD can recognize the equipment." (*Id.*, at 17, ll.9-12).

In accordance with the Specification, claim 1 is directed to a receiving apparatus comprising a decoder for decoding a transport stream, and a digital interface for transmitting and receiving the transport stream to/from digital signal processing equipment. Claim 1 further comprises a register for selecting a predetermined number of equipment units among a plurality of equipment units connected to the digital interface. The register allocates unique node identification numbers to the selected equipment units. According to an aspect of the invention, these unique node ID numbers may be automatically allocated when the equipment is connected to the bus of the IEEE 1394 interface. (*See, Specification,* p.9, l.34 - p.10, l.2). For each of the selected units, the register stores a record of the unique node ID number allocated to the selected unit. (*Id.*, at 10, ll.2-6). The register then maintains this record regardless of whether the

selected unit remains connected to the digital interface. (*Id.*, at 12, l.33 - p.13, l.2).

According to claim 3, the register confirms whether a device connected to the digital interface has already been allocated a unique node identification number when the device is connected to the digital interface. (*Id.*, at 12, l.33 - p.13, l.2).

According to claim 4 of the present application, the register automatically allocates the same unique node identification numbers to the selected devices when the selected devices are re-connected to the digital interface. (*See id.*, at 9, l.34 - p.10, l.2).

According to claim 6 of the present application, which depends from claim 1, when said unique node identification numbers have previously been allocated to the predetermined number of devices, the register prohibits cancellation of said records stored in the register. (*See id.*, at 14, ll.12-14; p.16, ll.29-32).

Claim 9 of the present invention depends from claim 7, which further depends from claim 1. Therefore, claim 9 includes the elements of claim 1, further comprising a display processing circuit for displaying a list of digital signal processing devices connected to the digital interface. (Figs. 6A-6B). Moreover, when an operation is performed to change the record of a device in which a program recording reservation has been set, the display processing circuit generates a predetermined warning display. (*Specification*, p.16, l.32 - p.17, l.5).

Independent claim 11 of the present application relates to a method of recognizing a plurality of digital signal processing devices connected to a digital broadcast receiving apparatus through a digital interface. In this method, a predetermined number of devices are selected from among the

plurality of digital signal processing devices connected to the digital interface. These selected devices are registered, during which time a unique node identification number is allocated to each of said selected devices. Further, for each of said selected devices, a record of the unique node identification number is stored for the selected device, regardless of whether said selected device remains connected to the digital interface.

Claim 13 includes the steps of claim 11, wherein the registering step further includes confirming whether a device connected to the digital interface has already been associated with a unique node identification number. (*Id.*, at 12, l.33 - p.13, l.2).

Claim 14 also includes the steps of claim 11, wherein the registering step further includes automatically allocating the same unique node identification numbers to the selected devices when the selected devices are reconnected to said digital interface. (*See id.*, at 9, l.34 - p.10, l.2).

According to claim 16, which depends from claim 11, the registering step may further include prohibiting cancellation of the stored records. (*See id.*, at 14, ll.12-14; p.16, ll.29-32).

Claim 19 incorporates the limitations of claim 17. Therefore, the method according to claim 11 further comprises displaying a list of digital signal devices connected to said digital interface. (Figs. 6A-6B). Moreover, said displaying step further includes generating a predetermined warning display when a change is made to said record of a device in which a program recording reservation has been set or a node identification number has been allocated. (*Specification*, p.16, l.32 - p.17, l.5).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

a. Whether claims 1, 3-8, 10-11, 13-18, and 20 are patentable under 35 U.S.C. § 103(a) over EP Patent No. 0853402 to Yoshino ("Yoshino") in view of U.S. Patent No. 5,764,930 to Staats ("*Staats*").

b. Whether claims 9 and 19 are patentable under 35 U.S.C. § 103(a) over *Yoshino* in view of *Staats*, and in further view of U.S. Patent No. 6,507,953 to Horlander et al. ("*Horlander*").

VII. ARGUMENT

A. Claims 1, 3-8, 10-11, 13-18, and 20 are Patentable Over *Yoshino* in View of *Staats*

The Examiner rejected claims 1, 3-8, 10-11, 13-18, and 20 as being obvious over the combination of *Yoshino* and *Staats*. Appellant respectfully submits that neither *Yoshino* nor *Staats*, either alone or in combination, disclose the limitations of independent claims 1 or 11, or any of the claims depending therefrom.

1. Independent Claims 1 and 11

Independent claim 1 recites a receiving apparatus, comprising:

> a register for selecting a predetermined number of devices from among a plurality of digital signal processing devices connected to said digital interface and for allocating unique node identification numbers to said selected devices, for each of said selected devices, said register storing a record of said unique node identification number allocated to said selected device and maintaining said record regardless of whether said selected device remains connected to said digital interface.

The Examiner acknowledges that *Yoshino* discloses a device which operates according to the standard IEEE 1394 Protocol, and thus fails to disclose maintaining a record of the unique node identification number allocated to selected devices regardless of whether said selected device remains connected to the digital interface. (*See, 2/9/07 Office Action*, p.7, ¶2). However, the Examiner contends that this defect is cured by *Staats*.

Staats discloses a computer system wherein a plurality of devices are connected through nodes of a communication bus. (*See Staats*, col.2, ll.6-10). According to this system, each node has an identifier and an initial bus address. (*Id.*). When the system is initialized, nodes associate with a driver by passing a reference ID to the driver. The reference ID is associated with the receiving node's bus address. (*See id.*, at col.2, ll.10-17). The driver stores the reference ID for use in later communications. (*See Staats*, col.3, ll.4-14).

According to *Staats*, device data records are created wherein for each node, the node base address is associated with a corresponding node unique ID. To initiate a transaction, a source node driver specifies a destination node reference ID. (*See Staats*, col.5, ll.4-27). The node reference ID, which is determined and stored at initialization, in turn, is used to obtain a pointer into the previously created device records. (*Id.*). From the device records, the destination node's base address may be obtained. (*Id.*).

a. Unique Node Identifier and Node Unique Identifier

The Examiner and the Appellants agree that a unique node identifier (ID), as claimed in the present application, and a node unique identifier (ID), as disclosed in *Staats*, are neither equivalent nor comparable. (*2/9/07 Office Action*, p.2, ¶1). The Specification of the present application describes that "the ID numbers of the nodes are allocated to the registered equipment and stored into a nonvolatile memory 60 in correspondence to the registered equipment." (*Specification*, p.10, ll.4-6). Thus the unique node ID refers to one of the "0" to "63" bus addresses in the IEEE Standard.

In contrast, *Staats* recites that "a node unique ID is a 64-bit number which includes a node vendor ID." (*Staats*, col.2, ll.65-66). A node vendor ID comprises a name or other identifier set by a manufacturer, e.g., a part number. Accordingly, because the node unique ID is set by the manufacturer or vendor, it never changes. (*See Staats*, col.2, 1.64) (stating that the node unique ID "is bus reset and system reset invariant.").

The node unique ID of *Staats* may properly be compared with a serial number of a device. But a serial number or *Staats'* node unique ID is not used as a unique node ID that is set upon connection to the bus.

b. Base Addresses

Staats discloses the use of base addresses. Specifically, Staats defines node base addresses as "the logical address of a node within the bus address space." (*Staats*, col.3, ll.15-16). Therefore, these node base addresses of *Staats* are what should properly be compared with the unique node IDs of present invention. However, the node base addresses are clearly distinct from the unique node IDs. As recited in the claims, "for each of said selected devices, said register storing a record of said unique node identification number allocated to said selected device and maintaining said record regardless of whether said selected device remains connected to said digital interface." In complete contrast, *Staats* describes that "[n]ode base addresses are subject to change across both bus resets and system resets." (*Staats*, col.3, ll.19-21).

There is no teaching in *Staats* of maintaining the same base addresses regardless of whether the devices are connected. In fact, if a device in *Staats* is disconnected and

then reconnected, it may never be assigned the same ID. That is, *Staats* describes that:

> if a bus reset occurs while a bus transaction is pending, the driver that initiated the transaction *will be forced to reinitiate the transaction with an updated base address* after the bus has reinitialized and a new topology map has been created.

(Staats, col.4, l.65 - col.5, l.2) (emphasis supplied).

Because the base address is changed after each bus reset, the device data record which includes the base address must be updated every time. (*Staats*, col.5, ll.28-30) ("If a bus reset occurs while the bus transaction is pending, the device data records are updated to reflect the new node base addresses."). Accordingly, *Staats*' node base addresses are not the same as the unique node IDs of claim 1, and *Staats* does not disclose "storing a record of said unique node identification number allocated to said selected device and maintaining said record regardless of whether said selected device remains connected to said digital interface."

c. Node Reference Identifier

The Examiner appears to equate the reference identifier (ID) of *Staats* with the unique node identification numbers of the claims. For example, the Examiner states that Staats discloses creation of a record including the reference ID. (*Advisory* Action, p.2). The Examiner further argues that "there is no limitation in claims 1 and 11 that requires a [unique node ID] other than what is disclosed in Staats as the [node reference ID]. " (*Advisory Action*, p.3). However, the reference ID of *Staats* is neither equivalent nor even comparable to the unique node ID of the present invention.

The reference ID, as described in *Staats*, is a parameter used by drivers to specify a target node. (*Staats*, col.3, ll.4-6). At system start-up, "the driver will store the reference ID for later use whenever the driver needs to communicate with its associated node." (*Staats*, col.3, ll.5-14). Specifically, the reference ID is associated with a device data record including a node base address and a corresponding node unique ID. (*Staats*, col.5, ll.4-10). Further, "the reference ID… will be used to obtain a pointer into the previously created device data records." (*Staats*, col.5, ll.21-26). A pointer, by definition, is "a variable that contains the address of a location in memory." (*Webopedia*, http://www.webopedia.com/TERM/p/pointer.html). Thus, the reference ID of *Staats* is merely that, a reference, or pointer, or variable, that is used to identify a record. That record, according to *Staats*, is subject to change.

Upon a bus reset, base addresses change, but the node reference IDs do not change. Thus, after a bus reset the node reference IDs are used to point to the previously created records based on the node unique ID in the record. "If a bus reset occurs while the bus transaction is pending, the device data records are updated to reflect a new node base addresses." (*Staats*, col.5, ll.28-30). Significantly, since *Staats'* record contains base addresses, that record changes after each bus reset and after a device is disconnected or reconnected. Moreover, since *Staats* clearly teaches that the base addresses change after a bus reset occurs, *Staats'* previously created record is not maintained "regardless of whether said selected device remains connected to said digital interface," as is recited in the claims. Specifically, after a bus reset, *Staats* requires that the previously stored record be changed to reflect new base addresses. That is not what Appellants have claimed.

The Examiner has agreed, during at least one telephonic interview, that *Staats'* data records include base addresses that are pointed to (or referenced) using node reference IDs. Although the node reference IDs are fixed, if the base address changes, the record changes. However, the Examiner nevertheless rejects such arguments when set forth in Appellant's formal response.

The Examiner explains in his continued rejections that although the data record as a whole changes after a bus reset, *Staats* nevertheless reads on claim 1 because the reference IDs do not change. (*Advisory Action*, pp.2-3). However, this argument is misplaced, because as discussed above, the reference IDs of *Staats* point to a data record. They are not included in the record. Further, the record to which they point changes following a bus reset. This is not similar at all to claim 1. Again, claim 1 recites "storing a record of said unique node identification number allocated to said selected device and maintaining said record regardless of whether said selected device remains connected to said digital interface." Thus, it states that the register stores a record of a unique node ID allocated to each device that has been connected to the bus. The register further retains this record regardless of whether the device is still connected. Accordingly, devices may be disconnected and reconnected without re-allocation of IDs. *Staats*, on the other hand, does not provide for any reconnection without reallocation.

Additionally, *Staats'* node reference IDs "are subject to change across system resets." (*Staats*, col.3, ll.3-4). This further evidences the fact that the reference IDs are not maintained "regardless of whether said selected device remains connected to said digital interface."

The claimed aspect of the present invention, as further described in the specification, does not utilize a reference

ID, a pointer, or any such variable. In fact, there is nothing in the present application or claims that is comparable to a reference ID.

Accordingly, none of the node unique ID, node reference ID, or node base address described in *Staats* are equivalent to the unique node ID of the present application. Further, none of the node unique ID, node reference ID, or node base address as implemented in *Staats* meets the limitation of "maintaining said record regardless of whether said selected device remains connected to said digital interface" as recited in claim 1.

d. Staats Does Not Cure the Deficiencies of *Yoshino*

In light of the above, Appellants respectfully submit that *Staats* fails to cure the acknowledged defect of *Yoshino* by failing to disclose at least maintaining the record of the allocated unique node identification number regardless of whether the selected device remains connected to a digital interface. For at least this reason, Appellants submit that claim 1 is patentable over *Yoshino* and *Staats*, taken either alone or in combination. Therefore, Appellants respectfully request that the final rejection of claim 1 be reversed.

Independent claim 11 recites similar limitations to those of claim 1. Specifically, claim 11 recites registering selected devices,

> said registering step including allocating a unique node identification number to each of said selected devices and, for each *of* said selected devices, storing a record of said unique node identification number for said selected device regardless of whether said selected device remains connected to the digital interface.

Thus, for at least the reasons discussed above in connection with claim 1, Appellants respectfully submit that claim 11 is also patentable over *Yoshino* and *Staats*, taken either alone or in combination. Accordingly, Appellants respectfully request that the final rejection of claim 11 be reversed.

2. **Claims 3 and 13**

Dependent claim 3 further recites that the "register confirms whether a device connected to said digital interface has already been allocated a unique node identification number when the selected device is connected to said digital interface." The Examiner contends that this limitation is met by *Staats'* disclosure that upon a bus reset, a processor initiates a scan and reassociates node reference IDs stored in memory with their corresponding node unique ID.

The Examiner's contention regarding claims 3 and 13 appears to be misplaced. Even assuming that *Staats* teaches reassociation of reference IDs and node unique IDs after a bus reset, re-association is far different than confirmation. In *Staats*, the reference IDs and the node unique IDs must be re-associated because information was lost during the reset. In contrast, because the unique node ID is maintained during a reset, or disconnection and reconnection of the device, it is not necessary to restore information as in *Staats*. Rather, the information is merely confirmed.

In light of the above distinction, Appellants respectfully submit that claims 3 and 13 are patentable over *Yoshino* and *Staats*, for reasons even beyond their dependency on independent claims 1 and 11, respectively. Therefore, Appellants request that the Examiner's rejection of claims 3 and 13 be reversed.

3. **Claims 4 and 14**

Dependent claim 4 recites "wherein said register automatically allocates the same unique node identification numbers to said selected devices when said selected devices are re-connected to said digital interface."

The Examiner contends that this limitation is taught by *Staats*. (*See, 2/9/07 Office Action*, p.9). However, the portions of *Staats* which the Examiner uses to support this contention only further show the differences between *Staats* and the pending claims of the present application. Specifically, *Staats* states that after a bus reset, a maintained record of the reference ID is used as a pointer into the device data record to obtain the updated node base address. (*Staats*, col.8, ll.11-20). In contrast, claim 4 regards the automatic allocation of the same unique node IDs as before reset/disconnection. Accordingly, *Staats* and the other cited references fail to disclose "wherein said register automatically allocates the same unique node identification numbers to said selected devices when said selected devices are re-connected to said digital interface."

4. **Claims 6 and 16**

Dependent claim 6 recites "when said unique node identification numbers have previously been allocated to said predetermined number of devices, said register prohibits cancellation of said records stored in said register."

The Examiner contends that this limitation is met by *Staats'* disclosure that records of reference IDs may be maintained. (*2/9/07 Office Action*, p.9; *Staats*, col.5, ll.17-19). However, maintaining a record of the reference ID is clearly not the same as prohibiting cancellation of such a record. In *Staats*, no cancellation of the reference ID record is even attempted. Accordingly, such cancellation is never

prohibited. Moreover, *Yoshino* also fails to disclose prohibiting cancellation of records, and thus fails to cure the defects of *Staats*.

Appellants submit that claim 6 is patentable over *Staats* and *Yoshino*, taken either alone or in combination. For at least the same reasons, Appellants also submit that claim 16, which recites "said registering step further includes prohibiting cancellation of said stored records" is also patentable. Accordingly, Appellants respectfully request that the rejections of claims 6 and 16 be reversed.

5. Claims 5, 7, 8, 15, 17, and 18

Claims 5, 7, and 8 depend from and therefore include the limitations of claim 1. Claims 15, 17, and 18 depend from and thus include the limitations of claim 11. Accordingly, for at least the reasons discussed above in connection with independent claims 1 and 11, Appellants respectfully submit that claims 5, 7, 8, 15, 17, and 18 are patentable over *Yoshino* and *Staats*. Moreover, Appellants request that the rejections of these claims be reversed.

B. Claims 9 and 19 are Patentable Over *Yoshino* in View of *Staats*, and in Further View of U.S. Patent No. 6,507,953 to Horlander et al. ("*Horlander*")

As claim 9 depends from claim 1 and claim 19 depends from claim 11, claims 9 and 19 are patentable over *Yoshino* and *Staats* for the reasons discussed above in connection with claims 1 and 11. *Horlander* does not cure the defects of *Yoshino* and *Staats*.

Horlander discloses a method of scheduling events between interconnected first and second video processing devices. (*Horlander*, col.1, ll.64-67). Information for a first event is programmed into the first device, and then compared to previously scheduled events on the first device. (*Id.*, at

col.2, ll.1-6). The information for the first event is then sent to the second device, which compares the event to other scheduled events on the second device. (*Id.*, at col.2, ll.6-13).

Horlander nowhere mentions anything comparable to "for each of said selected devices, said register storing a record of said unique node identification number allocated to said selected device and maintaining said record regardless of whether said selected device remains connected to said digital interface" as recited in the independent claims of the present application.

Moreover, claim 9 recites "when an operation is performed to change said record of a device in which a program recording reservation has been set, said display processing circuit generates a predetermined warning display." The Examiner acknowledges that *Yoshino* fails to teach this limitation, but contends that *Horlander* provides for this feature. (*2/9/07 Office Action*, p.10, ¶6).

Horlander makes no mention of a warning display generated when an operation is performed to change the record of a device. The sections of *Horlander* indicated by the Examiner merely indicate that an error/conflict detection unit may detect problems with a request to record a television program. (*See, 2/9/07 Office Action*, p.10, ¶6). Particularly, the error/conflict detection function may detect a scheduling conflict, whether a wrong type of tape (*e.g.*, digital or analog) is indicated, or whether the VCR is not connected. (*Horlander*, col.8, ll.9-14). Further, *Horlander* discloses that each device may retain a log of errors and conflicts. (*Id.*, at col.4, ll.12-26). However, a log of errors and conflicts is clearly different from a warning display. While a warning display is a cautionary device used to ensure that a particular action is intended, a log of errors merely records

problems with a system. Indeed, a log provides no warning at all.

Even further, *Horlander* does not disclose that a warning is generated in response to "an operation… to change said record of a device in which a program recording reservation has been set." *Horlander* does not disclose changing a record of a unique node ID, nor does *Horlander* mention any record of a unique node ID at all. Accordingly, *Horlander* does not teach performing an operation to change such a record.

Accordingly, Appellants respectfully submit that none of *Yoshino*, *Staats*, or *Horlander*, disclose "when an operation is performed to change said record of a device in which a program recording reservation has been set, said display processing circuit generates a predetermined warning display" as recited in claim 9. Similarly, none of these references disclose "wherein said displaying step further includes generating a predetermined warning display when a change is made to said record of a device in which a program recording reservation has been set or a node identification number has been allocated" as recited in claim 19. Therefore, Appellants respectfully submit that claims 9 and 19 are patentable over *Yoshino*, *Staats*, and *Horlander*, taken either alone or in combination. Accordingly, reversal of the rejection of these claims is respectfully requested.

VIII. CONCLUSION

For at least the foregoing reasons, Appellants respectfully request that the Board reverse the Examiner's rejections.

The Office is authorized to charge Deposit Account No. 12-1095 for the filing fee and for any other fees that might be required in connection with filing this Appeal Brief.

Dated: October 30, 2007

Respectfully submitted,

By 

Natalie S. Morelli
Registration No.: 58,545
LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK, LLP
600 South Avenue West
Westfield, New Jersey 07090
(908) 654-5000
Attorney for Applicant

789554_1.DOC

APPENDIX A - CLAIMS

1. (previously presented) A receiving apparatus for receiving a digital broadcast which comprises a transport stream in which video data and audio data have been compressed and multiplexed, comprising:

a decoder for decoding the transport stream;

a digital interface for mutually transmitting the decoded transport stream to and receiving the decoded transport stream from digital signal processing devices; and

a register for selecting a predetermined number of devices from among a plurality of digital signal processing devices connected to said digital interface and for allocating unique node identification numbers to said selected devices, for each of said selected devices, said register storing a record of said unique node identification number allocated to said selected device and maintaining said record regardless of whether said selected device remains connected to said digital interface.

2. (canceled)

3. (previously presented) An apparatus according to claim 1, wherein said register confirms whether a device connected to said digital interface has already been allocated a unique node identification number when said device is connected to said digital interface.

4. (previously presented) An apparatus according to claim 1, wherein said register automatically allocates the same unique node identification numbers to said selected devices when said selected devices are re-connected to said digital interface.

5. (previously presented) An apparatus according to claim 1, wherein said records stored in said register may be changed by user input.

6. (previously presented) An apparatus according to claim 1, wherein, when said unique node identification numbers have previously been allocated to said predetermined number of devices, said register prohibits cancellation of said records stored in said register.

7. (previously presented) An apparatus according to claim 1, further comprising a display processing circuit for displaying a list of digital signal processing devices connected to said digital interface.

8. (previously presented) An apparatus according to claim 7, wherein said display processing circuit is operable to visually discriminate between selected devices connected to said digital interface and selected devices not connected to said digital interface.

9. (previously presented) An apparatus according to claim 7, wherein, when an operation is performed to change said record of a device in which a program recording

reservation has been set, said display processing circuit generates a predetermined warning display.

10. (previously presented) An apparatus according to claim 1, further comprising display means for displaying a selection screen to select a device from among said selected devices.

11. (previously presented) A method of recognizing a plurality of digital signal processing devices connected to a digital broadcast receiving apparatus through a digital interface, comprising:

selecting a predetermined number of devices from among the plurality of digital signal processing devices connected to the digital interface; and

registering said selected devices,

said registering step including allocating a unique node identification number to each of said selected devices and, for each of said selected devices, storing a record of said unique node identification number for said selected device regardless of whether said selected device remains connected to the digital interface.

12. (canceled)

13. (previously presented) A method according to claim 11, wherein said registering step further includes confirming whether a device connected to the digital interface

has already been associated with a unique node identification number.

14. (previously presented) A method according to claim 11, wherein said registering step further includes automatically allocating the same unique node identification numbers to said selected devices when said selected devices are reconnected to said digital interface.

15. (previously presented) A method according to claim 11, wherein said registering step further includes determining said unique node identification number allocated to said selected device based on a user input.

16. (previously presented) A method according to claim 11, wherein said registering step further includes prohibiting cancellation of said stored records.

17. (previously presented) A method according to claim 11, further comprising displaying a list of digital signal devices connected to said digital interface.

18. (previously presented) A method according to claim 17, wherein said displaying step includes visually discriminating between selected devices connected to the digital interface and selected devices not connected to the digital interface.

19. (previously presented) A method according to claim 17, wherein said displaying step further includes generating a predetermined warning display when a change is

made to said record of a device in which a program recording reservation has been set or a node identification number has been allocated.

20. (previously presented) A method according to claim 11, further comprising displaying a selection screen that allows selection of devices from among said selected devices.

APPENDIX B - EVIDENCE

None.

APPENDIX C - RELATED PROCEEDINGS

None.